AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) An apparatus for purification of an in-flow solution, comprising:

a first cell frame;

a second cell frame including an in-flow port to receive the in-flow solution including the contaminant metal and an out-flow port both placed along a perimeter of the second cell frame, the out-flow port positioned above the in-flow port and to output a solution without the contaminant metal;

a compartment formed between the first cell frame and the second cell frame, the compartment to house an anode electrode, a cathode electrode and a membrane positioned between the anode electrode and the cathode electrode that collectively operate to purify the in-flow solution; and

a screen spacer interposed as an interface between the anode electrode and the membrane or the cathode electrode and the membrane, the screen spacer comprising a gasket structure that provides a defined distance between the membrane and the electrode.

2. (Previously Presented) The apparatus of claim 1, wherein the screen spacer is a first screen spacer positioned between the anode electrode and the membrane and the apparatus further comprises a second screen spacer positioned between the cathode electrode and the membrane.

3. (Previously Presented) The apparatus of claim 1, wherein the anode electrode is configured as a self-supporting screen including at least one connector for attachment to a bus bar situated on a top edge of the first cell frame.

4. (Previously Presented) The apparatus of claim 3, wherein the cathode electrode is configured as a mesh screen having at least one connector protruding from the mesh screen for coupling with a bus bar on a top edge of the second cell frame.

5. (Original) The apparatus of claim 4, wherein at least one sidewall of the second cell frame is either translucent or transparent.

6. (Previously Presented) The apparatus of claim 1 being a membrane electrolysis (ME) unit to recover a contaminant metal.

7. (Previously Presented) The apparatus of claim 1 being a membrane electrolysis (ME) unit to remove a contaminant metal from an in-flow solution for recycling of the contaminant metal.

8. (Original) The apparatus of claim 2 further comprising:

a first clamping frame situated adjacent to the first cell frame so that the first cell frame is between the first clamping frame and the first screen spacer;

a second clamping frame situated adjacent to the second cell frame so that the second cell frame is between the second clamping frame and the second screen spacer;

a plurality of fastening rods inserted through apertures of the first clamping frame and the second clamping frame; and

a plurality of fastening components each positioned on a corresponding end of one of the plurality of fastening rods.

9. (Original) The apparatus of claim 8, wherein each of the plurality of fastening components is threaded on the corresponding end of the one of the plurality of fastening rods.

10. (Previously Presented) The apparatus of claim 8, wherein the second clamping frame includes a centrally located opening to enable viewing of at least one sidewall of the second cell frame being either translucent or transparent.

11. (Previously Presented) The apparatus of claim 1, wherein the first cell frame further comprises an in-flow port and an out-flow port both placed along a perimeter of the first cell frame.

12. (Previously Presented) The apparatus of claim 2, wherein the membrane is a first membrane and the compartment formed by the first cell frame and the second cell frame further houses a non-conductive frame, a third spacer positioned between the non-conductive frame and the first membrane, a second membrane positioned between the second spacer and the non-conductive frame, and a fourth spacer positioned between the non-conductive frame and the second membrane.

13. (Previously Presented) The apparatus of claim 4, wherein the second cell frame includes an end wall that is either transparent or translucent to enable viewing of the anode electrode.

14. (Currently Amended) An apparatus comprising:

a first cell frame including a first compartment ~~housing~~ containing an anode and a sidewall being transparent or translucent to view internal components and operations within the first cell frame; and

a second cell frame including a second compartment ~~housing~~ containing a cathode,

wherein the first compartment and the second compartment collectively form a compartment to additionally house at least (i) a first membrane positioned between the anode and the cathode and (ii) a spacer interposed as an interface between the cathode and the first membrane, the spacer comprising a gasket structure that provides a defined distance between the membrane and the cathode.

15. (Previously Presented) The apparatus of claim 14, wherein the spacer is a first spacer, the apparatus further comprising a second spacer positioned between the anode and the first membrane.

16. (Original) The apparatus of claim 15 further comprising a third cell frame including an anode, a fourth cell frame including a cathode, and a non-conductive frame interposed between (1) the first cell frame and the second cell frame, and (2) the third cell frame and the fourth cell frame.

17. (Previously Amended) The apparatus of claim 16, wherein a sidewall of the fourth cell frame is either translucent or transparent.

18. (Original) The apparatus of claim 14 being a membrane electrolysis (ME) unit to recover chemical elements.

19. (Currently Amended) A system comprising:

a unit containing a process solution including chemical elements to be recovered;

a process line in fluid communications with the unit; and

a membrane electrolysis (ME) unit in fluid communication with the unit via the process line and to purify the process solution by removing the chemical elements, the ME unit comprising

a first cell frame including a first compartment containing an anode electrode,

a second cell frame including a second compartment containing a cathode electrode,

a plurality of screen spacers including a first screen spacer interposed as an interface between the first cell frame and a membrane and a second screen spacer interposed as an interface between the second cell frame and the membrane,

a third compartment formed between the first cell frame and the second cell frame, the third compartment to house ~~an anode electrode, a cathode electrode and~~ the

membrane positioned between the anode electrode and the cathode electrode with the plurality of screen spacers each comprising a gasket structure that provides a defined distance between respective electrodes and the membrane and configured for a process solution to be input at the cathode electrode over which chemical elements of the process solution may be removed by migration of the chemical elements through the ~~first~~ membrane to the anode electrode and collected within a solution processed at the anode electrode and being different from the process solution,

a first clamping frame situated adjacent to the first cell frame so that the first cell frame is between the first clamping frame and the first screen spacer,

a second clamping frame situated adjacent to the second cell frame so that the second cell frame is between the second clamping frame and the second screen spacer, the second clamping frame includes an opening to enable viewing of a substantial portion of a sidewall of the second cell frame being either translucent or transparent,

a plurality of fastening rods inserted through apertures of the first clamping frame and the second clamping frame, and

a plurality of fastening components each positioned on a corresponding end of one of the plurality of fastening rods.

20. (Original) The system of claim 19, wherein the unit comprises a holding container with a connector for adaptation to the process line.